- MONTHLY REPORTS

OCT 90

1935965 - R8 SEMS

DATE: NOVEMBER 9, 1990

TO: MIKE ATTAWAY

PROM: VICTOR MILLER/MIKE GOLLIHER

SUBJECT: MONTHLY REPORT - OCTOBER 1990

#### MINING

A total of 149,228 tons of ore and 301,510 tons of waste were mined this month. Active areas during the month in Phase I were the Sunday 5440 and 5420 and the Dakota Maid 5540, 5500, 5480 and 5460. The active bench in the Phase II stripping was the Sunday 5520. In Phase II it was critical that we produce 900 tons per hour. It appears that this is easily obtainable as production from that level averaged 1090 tph and approached 1300 tph at times.

We were able to mine in the pit 23 days this month. As a result, we were able to make up for last month's heavy pad loading/unloading schedule. The stripping ratio for the month was 2.02:1. This brings our year to date stripping ratio to 1.70:1.

Drilling and blasting of the bad portion of the catch bench in the Sunday pit was completed this month. Total cost was \$4,217.18. At this time there are no other areas in the pit where the highwall looks unstable. Normally a small toppling type instability like this would not be a problem, but because this area was above a haulroad, the decision was made to eliminate the safety risk.

Stockpile volumes at the end of the month are as follows:

	<u>TONS</u>	<u>GRADE</u>
Ruby Stockpile	76,378.7	0.050
Crusher Stockpile	50,220.5	0.033
ROM Stockpile	19,208	0.039

Blattner had no MSHA reportable accidents this month. This month's Blattner invoice is for \$681,558. The invoice reflects the heavy schedule in the mine. Total Force Account charges were \$60,084.20. Notable charges were \$33,035 for stockpiling ore both in the crusher area and on the Ruby Dump, \$6,259.50 raising GW-13, \$4,982.50 doing extra work on the leach pad, \$4,606 for wet holes, and \$2,225 burying driplines and building the ripper teeth to do it.

### **ENGINEERING**

A month-by-month mining schedule for 1991 was completed and maps were generated. On November 8, Fred Riker and Denny Crandall were up to review this plan for Blattner.

Preliminary waste dump designs show that raising the Ruby Dump an additional 40 feet above the permitted elevation will hold enough to finish mining the Oxide pits. Additional mining other than that (such as the Anchor Hill pit) will require additional acreage for waste dumps. The Forest Service area directly north of the current spent ore dump would be the ideal addition. Tailings and waste dumps for the expansion project were also designed. A \$500 gold sulfide pit was designed and reserves calculated.

John Roggenbuck has been made available for surveying for four hours a day. This has allowed much more time for optimizing ore/waste boundaries.

Gordon Coppock was terminated November 1 because of unexcused absences and failing to notify designated people of his absence.

Other projects for the month included:

- Staking the ultimate waste dump limits for additional clearing yet this fall.
- Discussed stockpiling of sulfide ore both on the Ruby Dump and in mined out areas of the pit.

Victor Miller

Mike Golliber

/rrl

cc: Jim Barron Rod MacLeod

GILT EDGE MINE
MONTHLY STATISTICS COMPARED TO BUDGET (06/04/90 UPDATE)
OCTOBER, 1990

	1990	<u>MONTH</u>		<u>ү</u> 1990	EAR TO DATE-	
	Budget	Actual	Variance	<u>Budget</u>	<u>Actual</u>	Variance
ORE MINED (TONS)	120,000	149,228	29,228	1,141,032	1,123,742	<17,290>
WASTE MINED (TONS)	240,000	301,510	61,510	1,787,920	1,915,782	127,862
TOTAL MINED (TONS)	360,000	450,738	90,738	2,568,952	3,039,524	19,384
GRADE ORE MINED (OZ/TON AU)	0.043	0.058	0.015	0.038	0.046	0.008
ORE CRUSHED (TONS)	120,000	175,477.2	55,477.2	1,168,698	1,216,955.8	48,257.8
GRADE ORE CRUSHED (OZ/TON AU)	0.038	0.058	0.020	0.038	0.041	0.003
ORE TO PADS (TONS)	120,000	79,949.5	<40,050.5>	1,185,551	1,135,946.1	<49,614.9>
SPENT ORE FROM PADS (TONS)	120,000	59,609.2	<60,390.8>	1,172,729	964,157.7	<208,571.3>
METAL PRODUCED (OZ)						
AU AG	3,200	3,933.43	733.43	<b>y</b>	27,553.27	
NU	3,360	2,351.04	<1,008.96	> 25,557.0	17,488.61	. 8,068.39

## AVERAGE DAILY CRUSHER HEAD NaCN SHAKE VS FIRE

DATE	TONS	A.A.	A.A. OZS.	FIRE	FIRE OZS.
10/01	9723.2	0.026	252.803	0.026	252.803
10/02	10563.0	0.032	338.016	0.031	327.453
10/03	7458.3	0.028	208.832	0.027	201.374
10/04	7010.9	0.031	217.338	0.031	217.338
10/05	7577.5	0.048	363.720	0.057	431.918
10/08	7908.0	0.052	411.216	0.055	434.940
10/09	4249.4	0.050	212.470	0.055	233.717
10/10	8517.2	0.064	545.101	0.074	630.273
10/11	6985.2	0.044	307.349	0.044	307.349
10/12	6485.4	0.030	194.562	0.027	175.106
10/15	8279.0	0.025	206.975	0.028	231.812
10/16	9449.0	0.053	500.797	0.055	519.695
10/17	6037.0	0.029	176.280	0.032	193.184
10/18	7233.1	0.039	282.091	0.046	332.723
10/19	9209.2	0.056	515.715	0.054	497.297
10/22	7382.4	0.062	457.709	0.058	428.179
10/23	7244.4	0.060	434.664	0.058	420.175
10/24	6427.0	0.024	154.248	0.026	167.102
10/25	8297.0	0.042	348.474	0.046	381.662
10/26	8916.6	0.052	463.663	0.066	588.496
10/29	7592.0	0.090	683.280	0.143	1085.656
10/30	5745.6	0.039	224.078	0.052	298.771
10/31	7186.8	0.148	1063.646	0.256	1839.821
TOTAL	175477.2	0.049	8563.028	0.058	10196.843

## GILT EDGE MINE

### BROHM MINING CORP.

MINE STATISTICS FOR OCTOBER 1990

DESCRIPTION	MONTH T	ODATE	YEAR TO	DATE	PROJECT TO DATE	
	В.С.Ү.	TONS	B.C.Y.	TONS	B.C.Y.	TONS
SUNDAY PIT ORE	47840	95680	500234	1000468	1133947	2267894
SUNDAY PIT WASTE	94430	188860	705342	1410684	1723936.5	3447873
TOTAL SUNDAY PIT	142270	284540	1205576	2411152	2857883.5	5715767
DAKOTA PIT ORE	26774	53548	61637	123274	74437	148874
DAKOTA PIT WASTE	56325	112650	252549	505098	482872	965744
TOTAL DAKOTA MAID	83099	166198	314186	628372	557309	1114618
TOTAL ORE MINED	74614	149228	561871	1123742	1208384	2415768
TOTAL WASTE MINED	150755	301510	957891	1915782	2206808.5	4413617
TOTAL MINED	225369	450738	1519762	3039524	3415192.5	6830385
GRADE ORE MINED		A U		AU		AU
SUNDAY PIT ORE		0.053		0.045		0.042
DAKOTA PIT ORE		0.067		0.054		0.051
TOTAL ORE MINED		0.058		0.046		0.043

ASSUME: 2 TONS/BCY

ASSUME: 26.0 BCY/TRUCK

DATE: DECEMBER 6, 1990

TO: JIM BARRON

FROM: VICTOR MILLER/MIKE GOLLIHER

SUBJECT: MONTHLY REPORT - NOVEMBER 1990

### MINING

A total of 78,880 tons of ore and 208,668 tons of waste were mined this month, with the greater percentage of ore and waste coming from the Dakota Maid Pit. Active areas during the month in Phase I were the Sunday 5420 and the Dakota Maid 5460 benches. The Phase II 5520 bench in both pits was all but completed. At this point in time, waste stripping in Phase II is ahead of schedule. Partially because of a reduced loading, unloading schedule on the leach pad and the ability to mine on a 100 foot wide bench faster than predicted.

Mining was hampered this month as a result of the delay in unloading/loading Cells 6 and 7. Most of our drilling activity had been geared toward opening up large areas of ore. When the leach pad did not need loading we were left ore bound with both the crusher and Ruby stockpiles full. There are still no large areas of waste readily available so Blattner will face a reduced mining schedule until the leach pad opens up and allows us to reduce our in-pit inventory of shot ore.

Stockpile volumes at the end of the month are as follows:

	TONS	GRADE	
Ruby Stockpile	59,809.9	0.050	
Crusher Stockpile	56,917.2	0.049	
ROM Stockpile	35,600	0.039	

This month's Blattner invoice is for \$425,925. We were below budget in every category except for Grade Ore Mined and Grade Ore Crushed (see attachment). Total force account charges were \$18,914 vs. a budget of \$19,000. Notable charges were \$2,921 for pushing ore to the crusher stockpile, \$3,127.doing extra work on the leach pad and \$5,478 for wet holes. As per an earlier staff meeting, Blattners haul trucks are scheduled to receive "large" identification numbers but at this time they have not been installed.

### **ENGINEERING**

The initial month-by-month mining schedule for 1991 that was submitted to Denver has been undergoing incremental 5% increases in production to see what effect the increased

production would have on scheduling in the pit. This process is not yet completed. The increased mining rate will force us to either raise the permitted height of the Ruby waste dump or permit additional acres or use Hoodoo Gulch. The higher production rate the quicker this problem will have to be solved because at current proposed production levels to support 1.44 million ore ton the Ruby Waste Dump will be full at the end of 1991.

Waste dumps and tailings pond designs for the Expansion Project were done to show what kind of a cost savings would be shown by having two ponds with only a small one requiring lining.

Don Quaschnick, another logging outfit in this area was contacted about getting a bid for timber clearing. However, Jim Christensen still remains the lowest bidder for timber clearing for next years production.

Approximately 10-12 tons of sulfide material were crushed to 1/2" at a Fisher crusher and an additional 12-15 tons were crushed to 1" at our crusher. Some of the 1" material was put into 6 barrels and sent off to Degerstom in Spokane for column leach testing.

Bob Fox was awarded the Ore Control Technician position and is working out good. He still needs to get more familiar with the computer but he shows a lot of desire to do so.

The COMPAQ computer now has a 300 meg hard drive and enhanced memory. As soon as all the new bugs are worked out we will be much more able to utilize MEDSYSTEM BLASTHOLE MANAGER and AUTOCAD.

Victor Miller

Mike Golliher

/vhc

cc: Jim Barron Rod MacLeod

### GILT EDGE MINE

### BROHM MINING CORP.

MINE STATISTICS FOR NOVEMBER 1990

DESCRIPTION	MONTH TO DATE		YEAR TO	YEAR TO DATE		PROJECT TO DATE	
	B.C.Y.	TONS	В.С.Ү.	TONS	B.C.Y.	TONS	
SUNDAY PIT ORE	14670	29340	514904	1029808	1148617	2297234	
SUNDAY PIT WASTE	31355	62710	736697	1473394	1755291.5	3510583	
TOTAL SUNDAY PIT	46025	92050	1251601	2503202	2903908.5	5807817	
DAKOTA PIT ORE	24770	49540	86407	172814	99207	198414	
DAKOTA PIT WASTE	72979	145958	325528	651056	555851	1111702	
TOTAL DAKOTA MAID	97749	195498	411935	823870	655058	1310116	
TOTAL ORE MINED	39440	78880	601311	1202622	1247824	2495648	
TOTAL WASTE MINED	104334	208668	1062225	2124450	2311142.5	4622285	
TOTAL MINED	143774	287548	1663536	3327072	3558966.5	7117933	
GRADE ORE MINED		AU		AU		AU	
SUNDAY PIT ORE		0.047		0.045		0.042	
DAKOTA PIT ORE		0.050		0.053		0.051	
TOTAL ORE MINED		0.049		0.046		0.043	

ASSUME: 2 TONS/BCY ASSUME: 26.0 BCY/TRUCK

### AVERAGE DAILY CRUSHER HEAD NaCN SHAKE VS FIRE

		A.A.	A.A.	Fire	Fire	
Date	TONS	Au opt	ounces	Au opt	ounces	
11/01/90	5535.2	0.073	404.070	0.116	642.083	Heap 36
11/12/90	4413.0	0.046	202.998	0.062	273.606	Heap 37
11/13/90	5233.2	0.030	156.996	0.047	245.960	
11/14/90	7690.0	0.041	315.290	0.049	376.810	
11/15/90	10223.1	0.034	347.585	0.040	408.924	
11/16/90	9171.2	0.058	531.930	0.071	651.155	
11/19/90	8123.4	0.035	284.319	0.042	341.183	
11/20/90	7206.2	0.028	201.774	0.039	281.042	
11/21/90	4857.1	0.032	155.427	0.038	184.570	
TOTAL	62452.4	0.042	2600.388	0.055	3405.333	

GILT EDGE MINE
MONTHLY STATISTICS COMPARED TO BUDGET (06/04/90 UPDATE)
NOVEMBER, 1990

	<u>MONTH</u>			<u>YEAR TO DATE</u>			
	Budget	Actual	<u>Variance</u>	<u>Budget</u>	<u>Actual</u>	Variance	
ORE MINED (TONS)	120,000	78,880	<41,120>	1,261,032	1,202,622	<58,410>	
WASTE MINED (TONS)	240,000	208,668	<31,332>	2,027,920	2,124,450	96,530	
TOTAL MINED (TONS)	360,000	287,548	<72,452>	3,288,952	3,327,072	38,120	
GRADE ORE MINED (OZ/TON AU)	0.042	0.049	0.007	0.038	0.046	0.008	
ORE CRUSHED (TONS)	120,000	62,452.4	<57,547.6>	1,288,698	1,279,408.2	<9,289.8>	
GRADE ORE CRUSHED (OZ/TON AU)	0.038	0.055	0.017	0.038	0.041	0.003	
ORE TO PADS (TONS)	120,000	72,324.5	<47,675.5>	1,305,551	1,208,270.6 <	97,280.4>	
SPENT ORE FROM PADS (TONS)	120,000	62,864.5	<57,135.5>	1,292,729	1,027,022.2 <	265,706.8>	
METAL PRODUCED (OZ) AU AG	3,200 3,040	2,719.14 2,670,73		•	30,272.41 20,159.34		

DATE: JANUARY 7, 1991

TO: JIM BARRON

FROM: ROD MACLEOD

SUBJECT: MONTHLY REPORT - DECEMBER 1990

#### PIT GROLOGY

Advance and final wall mapping continued during the month. Work has started on a geologic progress map for the oxide mine which will be integrated with regional geology. Additional assistance is being provided to grade control as needed.

#### OXIDE EXPLORATION

Work began towards formulating an oxide exploration program and budget/AFE for 1991. Three exploration target areas have been selected for the 1991 program. Field work can proceed when the budget has been finalized and approved.

Most rock chip geochemistry has now been entered into Autocad format in the computer.

#### EXPANSION PROJECT

A regional geologic map was compiled and sent to Dan Gregory at ENSAR. The map will be used for his hydrologic assessment of the Expansion Project area.

Organization and moving of drill hole rejects (1988-89 program) continued throughout most of the month. The two Lead garages were completely emptied. The Deadwood garage is still full. All assistance from Bondar-Clegg was terminated at the end of December. With the closing of the Bondar prep lab, we will now pay rent on the Deadwood garage and we also agreed to purchase two of their pressure filters @ \$500.00 each.

A final review and map summary of all exploration permits was completed.

### **MISCELLANBOUS**

A review of historical assay data was begun on the old Gilt Edge tails. Information regarding the tails is scarce, but Kappes, 1982 estimated that there is approximated 150k tons of tails with an average grade of .030 opt. It was estimated that an average of 58% recovery would be expected.

/vnc

cc: Jim Barron Victor Miller Mike Golliher Sandor Ringhoffer DATE: JANUARY 9, 1991

TO: JIM BARRON

FROM: VICTOR MILLER/MIKE GOLLIHER

SUBJECT: MONTHLY REPORT - DECEMBER 1990

#### MINING

A total of 67,898 tons of ore and 72,400 tons of waste were mined this month. Active areas during the month in Phase I were the Sunday 5420 and the Dakota Maid 5440 benches. In Phase II the Dakota Maid 5520 bench was completed. Both ore and waste production could have been higher but a combination of extremely cold weather and shutting down for the holidays restricted mining to just 11 days in December. Overall we were short just 1,582 tons from meeting our budgeted total tons for the year of 3,468,952 tons. Ore production was 3.8% low and waste production 2.3% high versus budgeted ton mined for 1990. Ore grade for the year was 0.046 opt Au versus a predicted 0.039 opt.

Stockpile volumes at the end of the month are as follows:

	<u>tons</u>	GRADE
Ruby Stockpile	43,348.9	0.050
Crusher Stockpile	39,395.2	0.045
ROM Stockpile	66,500	0.039

This month's Blattner invoice is for \$283,415 and reflects the reduced production rate because of the cold and the holidays. Total Force Account charges were \$16,894 vs. a budget of \$19,000. Mining, crushing and pad loading/unloading were all under budget.

On 12/5/90 the MSHA inspector was given a mine tour. No citations were given to Brohm relating to the pit but Blattner did receive one for failing to document daily safety inspections of the work area. They now complete those forms and we now document our weekly inspection of the highwall.

#### **ENGINEERING**

A preliminary evaluation was done to see if finer crushing and agglomerating the mines high grade ore was feasible. Bottle roll tests indicate that approximately 20% better recovery could be obtained for this high grade. The cost of crushing would be \$2.75/ton. Thus, on 35,000 tons of 0.100 opt ore a profit of approximately \$170,000 could be realized. The first window to do this may be in March or April, so an AFE will be prepared to detail the plan.

Numerous 1991 production scenarios were evaluated until the final 1,440,000 ton was finalized.

Began timber clearing in the Ruby Waste for this years production. The costs associated with timber clearing were negotiated somewhat and as a result Christensen will now pay us stumpage. This should reduce the cost by approximately \$1000-\$1500.

Victor Miller

Mike Golliher

/vhc

cc: Jim Barron

Rod MacLeod

## GILT EDGE MINE

### BROHM MINING CORP.

MINE STATISTICS FOR DECEMBER 1990

DESCRIPTION	MONTH T	MONTH TO DATE		YEAR TO DATE		O DATE
	B.C.Y.	TONS	B.C.Y.	TONS	B.C.Y.	TONS
SUNDAY PIT ORE	23814	47628	538718	1077436	1172431	2344862
SUNDAY PIT WASTE	10926	21852	747623	1495246	1766217.5	3532435
TOTAL SUNDAY PIT	34740	69480	1286341	2572682	2938648.5	5877297
DAKOTA PIT ORE	10135	20270	96542	193084	109342	218684
DAKOTA PIT WASTE	25274	50548	350802	701604	581125	1162250
TOTAL DAKOTA MAID	35409	70818	447344	894688	690467	1380934
TOTAL ORE MINED	33949	67898	635260	1270520	1281773	2563546
TOTAL WASTE MINED	36200	72400	1098425	2196850	2347342.5	4694685
TOTAL MINED	70149	140298	1733685	3467370	3629115.5	7258231
GRADE ORE MINED		AU		AU		AU
SUNDAY PIT ORE		0.054		0.045		0.042
DAKOTA PIT ORE		0.040		0.052		0.050
TOTAL ORE MINED		0.050		0.046		0.043

ASSUME: 2 TONS/BCY

ASSUME: 26.0 BCY/TRUCK

### AVERAGE DAILY CRUSHER HEAD NaCN SHAKE VS FIRE

Date	TONS	A.A. Au opt	A.A. ounces	Fire Au opt	FIRE ounces	
12/11/90	6634.2	0.044	291.905	0.046	305.173	Heap 37
12/12/90	8434.0	0.036	303.624	0.045	379.530	
12/13/90	5299.1	0.044	233.160	0.051	270.254	
12/13/90	2729.9	0.039	106.466	0.044	120.116	Heap 38
12/14/90	6086.1	0.039	237.358	0.037	225.186	
12/17/90	7309.4	0.048	350.851	0.051	372.779	
12/18/90	5484.3	0.039	213.888	0.037	202.919	
TOTAL	41977.0	0.041	1737.252	0.045	1875.957	

GILT EDGE MINE
MONTHLY STATISTICS COMPARED TO BUDGET (06/04/90 UPDATE)
DECEMBER, 1990

	<u>Month</u>			<u>YEAR TO DATE</u>		
	Budget	<u>Actual</u>	<u>Variance</u>	Budget	<u>Actual</u>	<u>Variance</u>
ORE MINED (TONS)	60,000	67,898	7,898	1,321,032	1,270,520	<50,512>
WASTE MINED (TONS)	120,000	72,400	<47,600>	2,147,920	2,196,850	48,930
TOTAL MINED (TONS)	180,000	140,298	<39,702>	3,468,952	3,467,370	<1,582>
GRADE ORE MINED (OZ/TON AU)	0.043	0.050	0.007	0.039	0.046	0.007
ORE CRUSHED (TONS)	60,000	41,977.0	<18,023.0>	1,348,698	1,321,385.	2 <27,312.8>
GRADE ORE CRUSHED (OZ/TON AU)	0.038	0.045	0.007	0.038	0.042	0.004
ORE TO PADS (TONS)	60,000	75,960.0	15,960.0	1,365,551	1,284,230.6	<81,320.4>
SPENT ORE FROM PADS (TONS)	120,000	111,289.9	< 8,710.1>	1,412,729	1,138,312.1	<274,416.9>
METAL PRODUCED (OZ) AU AG	2,200 2,800	2,861.48 3,741.26		♥	33,133.99 23,900.60	

### MONTHLY REPORT

DATE:

JANUARY 15, 1991

TO:

JIM BARRON

FROM:

RINGHOFFER KIM & ROD MACLEOD/SANDOR

SUBJECT:

MONTHLY REPORT - DECEMBER 1991

### **SUMMARY**

During the month of December, the geology department:

- Ended the 1991 oxide drilling program with an additional 2,310 feet drilled. This brings the total footage drilled in 1991 to 21,137 feet in 91 holes. The total cost of the program was \$255,986.73, or \$12.11/foot;
- Continued to work with Engineering on the Anchor Hill/Southeast Langley oxide reserves;
- Reviewed Gilt Edge geologic and model data with Homestake and Pegasus personnel;
- Copied, prepared, and sent data requested by Pegasus to them;
- Collected 1,200 pounds of possible metallurgic sample from a trench cut on Anchor Hill;
- Assisted with pit operations as needed.

### OXIDE EXPLORATION

The 1991 oxide drilling program was ended during the month after drilling an additional 2,310 feet on Anchor Hill. The decision to suspend drilling was based on the number of outstanding assays and more importantly, the need to finalize a pit and facilities design for permitting purposes. The following summarizes the footages and areas drilled:

<u>Area</u>	Number of Holes	Total <u>Footage</u>	Percent of Total Footage
Anchor Hill	29	9,867	46.7%
Golden Crest	1	110	0.5%
Hoodoo Extension	8	1,115	5.3%
Southeast Langley	53	10,045	47.5%

The total cost of the program was done for approximately \$255,986.73, or \$12.11/foot. These costs include all drilling, site construction, temporary labor, and assaying. All costs except for shipping of pulps and skidder charges (approximately \$1,000) should be accrued in accounts payable.

All assay results are now (as of January 6, 1992) complete and entered into the computer. A complete assay summary is attached.

It is recommended that additional shallow (<500 feet) angle drilling be completed in the southwest portion of Anchor Hill and that deeper (>500 feet) development drilling be completed for identification of future oxide reserves at Anchor Hill.

#### RESERVE MODELING

All drill hole data has been entered into the computer. The geologic interpretation was then checked with new drilling in both cross-sections and plan. It was determined that although changes will need to be made in the model, the old interpretation as more than adequate for defining mineable reserves to permit. The interpretation will be completed as time and computer availability permits.

### GILT EDGE REVIEW

Several days were spent reviewing Gilt Edge data with Pegasus and Homestake personnel. In addition, time was spent preparing copies of data for Pegasus.

rl

c: Victor Miller Mike Golliher ••••••••

DATE: FEBRUARY 8, 1991

TO: JIM BARRON

FROM: VICTOR MILLER/MIKE GOLLIHER

SUBJECT: MONTHLY REPORT - JANUARY 1991

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### **MINING**

A total of 111,210 tons of ore and 232,758 tons of waste were mined this month. Active areas during the month in Phase I were the Dakota Maid 5440 and the Sunday 5420 and 5400 benches. In Phase II the Sunday 5500 bench was begun.

As noted in prior weekly reports, the ore estimate for the Sunday 5400 bench based on 5420 bench blastholes overestimated what was found on the 5400. As a result, we were temporarily short of ore. We have now found that the block model has overestimated the ore for the first shot between the Sunday and Dakota Maid pits, so in effect we are still tight for accessible blast ore. Hopefully, as drilling progresses farther into the Dakota Maid, more ore will be developed. Initial indications are that we are seeing a lot more sulfide ore than what was originally indicated by the model. On the plus side, we are seeing more mineable areas of + 0.10 opt material. The high grade ore is being stockpiled in a separate part of the ROM stockpile so that is can be crushed and placed on Cell 7 which will have a longer leach time than the other cells. The stockpiling of this high grade ore is the reason that there is such an unusual discrepancy between the grade of the ore mined this month versus the grade of ore crushed.

Stockpile volumes at the end of the month are as follows:

	<u>TONS</u>	<b>GRADE</b>
Ruby Stockpile	76,958.9	0.038
Crusher Stockpile	39,628.8	0.034
ROM Stockpile	59,146	0.039

#### **ENGINEERING**

As mining approaches the relic tailings, it has become important to devise a plan either for disposing of them in the Ruby waste dump, processing them through the leach cycle, or somehow working around them and reclaiming them in place. The original reclamation plan calls for reclaiming them in place, but there are both pros and cons to this. The plan that

Myron likes the best is putting them in the waste dump where the overwhelming amount of waste would help to attenuate the effects of the tailings. To help characterize the tailings, five holes were auger drilled. Splits of the samples were made and were sent to our lab and another for testing. Our lab ran NaCn shake to determine grade and determined percent moisture. Gold grade varied between 0.006 opt to 0.030 opt with an average of 0.015 and the percent moisture ran between 9.6 and 30.8 with an average of 18.6 percent. As gold values are low and percent moisture and clay content is high, running them through the leach process would not be beneficial. Myron is working on a technical revision to allow us to put the tailings in the waste. Note that only 1/3 of the tails are to be mined to develop the pit design and removing the additional tails cost \$100,000 plus. That, of course depends on both the final estimated cost of hauling the additional material and whether or not it is truly desirable to put them in a different drainage.

Three different waste dump extension possibilities were devised. These still need to be reviewed with Pat and Myron.

A technical revision is being put together by the Engineering Department along with Pat, Jim Thompson, and Lance to raise the berm on the leach pad to contain the PMP event. Tasks and time limits have been set and progress is being made.

A detailed pad loading schedule was completed with Jim Thompson for 1991.

Vic Miller finally got his South Dakota driver's licence after a ticket cost him \$55.

Work was done on the 1990 mining reconcilation between the blast holes, crusher, and mine mineral model.

Work was done in reviewing the IMC sulfide mining plan.

Victor Miller

Mike Golliher

/rrl

cc: Jim Barron

Rod MacLeod

## GILT EDGE MINE

### BROHM MINING CORP.

MINE STATISTICS FOR JANUARY 1991

DESCRIPTION	монтн т	MONTH TO DATE		DATE	PROJECT TO DATE	
	B.C.Y.	TONS	B.C.Y.	TONS	B.C.Y.	TONS
SUNDAY PIT ORE	29997	59994	29997	59994	1202428	2404856
SUNDAY PIT WASTE	77966	155932	77966	155932	1874180.5	3748361
TOTAL SUNDAY PIT	107963	215926	107963	215926	3046611.5	6093223
DAKOTA PIT ORE	25608	51216	25608	51216	134950	269900
DAKOTA PIT WASTE	38413	76826	38413	76826	619538	1239076
TOTAL DAKOTA MAID	64021	128042	64021	128042	754488	1508976
TOTAL ORE MINED	55605	111210	55605	111210	1337378	267 <b>4</b> 756
TOTAL WASTE MINED	116379	232758	116379	232758	2463721.5	4927443
TOTAL MINED	171984	343968	171984	343968	3801099.5	7602199
GRADE ORE MINED		AU		AU		AU
SUNDAY PIT ORE		0.030		0.030		0.042
DAKOTA PIT ORE		0.074		0.074		0.055
TOTAL ORE MINED		0.051		0.051		0.043

ASSUME: 2 TONS/BCY ASSUME: 26.0 BCY/TRUCK

GILT EDGE MINE
MONTHLY STATISTICS COMPARED TO BUDGET
JANUARY, 1991

	<u>MONTH</u>			<u>y</u> 1991	YEAR TO DATE	
	Budget	<u>Actual</u>	<u>Variance</u>	Budget	<u>Actual</u>	<u>Variance</u>
ORE MINED (TONS)	90,000	111,210	21,210	90,000	111,210	21,210
WASTE MINED (TONS)	230,000	232,758	2,758	230,000	232,758	2,758
TOTAL MINED (TONS)	320,000	343,968	23,968	320,000	343,968	23,968
GRADE ORE MINED (OZ/TON AU)	0.045	0.051	0.006	0.045	0.051	0.006
ORE CRUSHED (TONS)	90,000	118,564.2	28,564.2	90,000	118,564.2	28,564.2
GRADE ORE CRUSHED (OZ/TON AU)	0.041	0.034	0.007	0.041	0.034	0.007
ORE TO PADS (TONS)	80,000	84,720.6	4,720.6	80,000	84,720.6	4,720.6
SPENT ORE FROM PADS (TONS)	80,000	0	<80,000>	80,000	0	<80,000>
METAL PRODUCED (OZ)	2,812	3,050.46	238.46	2,812	3,050.46	
AG	1,944	3,910.14	1,966.14	1,944	3,910.14	1,966.14

### AVERAGE DAILY CRUSHER HEAD NaCN SHAKE VS FIRE

Date		A.A. Au opt		Fire   Au opt		
01/02/91 01/03/91		0.031		0.035	207.631	Heap 38
01/07/91 01/08/91	6168.0   5596.0	0.038 0.044	234.384 246.224	0.039	240.552 251.820	Heap 39
01/11/91	9448.0	0.024 0.029	226.752 263.320	0.026	245.648 263.320	
01/15/91 01/16/91	7320.0     8448.0     5040.0     4712.0	0.029 0.036	244.992 181.440	0.038   0.038   0.058	236.544 191.520	
01/21/91	6512.0   5804.0	0.036 0.022	234.432	0.048	312.576 150.904	
01/28/91 01/29/91	5524.6	0.032 0.037	176.787 155.492	0.033 0.036 0.027	182.312 151.290	
01/31/91		0.024	203.426	0.032	271.235	

•••••••••••••••••••

DATE:

**FEBRUARY 8, 1991** 

TO:

JIM BARRON

FROM:

ROD MACLEOD/SANDOR RINGHOFFER

SUBJECT:

**MONTHLY REPORT - JANUARY 1991** 

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### **SUMMARY**

The geology department began exploration activities in the Hoodoo Extension area, designed an in pit development drilling program, and compiled geologic and hydrologic data for the land application permit.

### **EXPLORATION**

A map compilation and written summary of all active exploration permits was completed.

Mapping and sampling of three accessible adits located in the Hoodoo Extension area was started. Initial results (Figure 1) appear favorable. To date, 45% of the underground rock chip samples have assayed  $\geq 0.020$  opt Au (range 0.021 to 0.777; 23% are  $\geq 0.100$  opt Au). All reported assays have been analyzed by using a cyanide shake digestion and AA finish.

A preliminary review of land ownership was completed for the Spruce Gulch area. This was done to check for possible conflicts of interest with Golden Reward Mining Company. No conflicts were immediately evident and a data package has since been received from Paul Miller for our review.

### PIT GEOLOGY

A year end geologic compilation of bench geology was completed. The next step is to digitize the map into the computer. This will make the data more useable (at different scales) and easier to update.

An in pit development drilling program was laid out for three areas in the Dakota Maid Pit. Some of the holes will be drilled with the Blattner blasthole rig, but most will need to be drilled using a reverse circulation rig. Bid requests were made of Dateline Drilling, Douglas Drilling, and Drilling Services. At this time, Douglas Drilling appears to have the best package to offer.

Advance and final wall mapping is ongoing.

### **MISCELLANEOUS**

Four geologic cross sections and a surface geologic map showing hydrologic data were compiled for the land application permit. Lithologic and water data was also summarized for exploration and monitor well bore holes.

Rod MacLeod

Sandor Ringhoffer

/rrl

cc: Victor Miller

Mike Golliher

	MONTHLY REPORT
DATE:	MARCH 6 1991
TO:	JIM BARRON
FROM:	ROD MACLEOD/SANDOR RINGHOFFER
SUBJECT:	MONTHLY REPORT - FEBRUARY 1991

### SUMMARY

The geology department continued work on an in pit development drilling program, continued underground mapping and sampling in the Hoodoo Extension area, began a review of geologic and geochemical data for all of BMC lands, and began a review of the Paul Miller data package submittal.

### **EXPLORATION**

Underground mapping and sampling continued in the Hoodoo Extension area. All assays are back for Hoodoo Adits #1 and #2. Sample distributions and assays (AA) are shown on the attached map. Assays are summarized as follows:

Hoodoo Adit #1	No.	Percentage Total
Samples < 0.020 opt Au	28	58%
Samples $\geq 0.020$ opt Au (7(15%) samples $\geq .100$ opt Au	20	42%
TOTAL	48	100%

Hoodoo Adit #2	No Significant Values (6 samples taken)
	(6 samples taken)

Underground mapping and sampling of two additional adits is planned as time permits. A soil geochemical grid and an initial phase of drilling (six to ten holes) is recommended for the area.

A review of all available geologic and geochemical data for BMC controlled lands was begun this month. The review is being used to develop an exploration plan which will prioritize exploration target areas and prepare for presentation(s). A summary report is forthcoming.

A review of the data package submitted to us from Paul and Jean Miller was begun. Data for the Monarch Mine and Spruce Gulch areas adjacent to BMC's state lease in section 36 indicate there is potential for definition of additional reserves. A meeting is tentatively scheduled with Paul Miller in March and a recommendation should follow.

### PIT GEOLOGY

Plans to begin an in pit development drilling program, using an outside contractor, have been postponed until further notice. As much drilling as possible will be scheduled with Blattner's blasthole rig. Since much of the planned drilling will require angled holes deeper than 70 feet, we will be limited in what can be completed. The program was designed to confirm oxidation and model block grades which will ultimately determine pit design and mining costs.

Four in pit development holes were completed with the Blattner rig in February. Two holes (R91-719 and R91-720) were drilled in the "Apex area" and two (R91-721 and R91-722) were drilled in the bone year ("aborted bunny-ear") area. Assays and ore types for intervals assaying above 0.020 opt Au are summarized below:

			ine a coloridad and
R91-719 (TD = 70')	0 - 45	45' @ .067	oxide
	55 - 65	10' @ .030	mixed
R91-720 (TD = 70')		No significant values	
R91-721 (TD = 70')	0 - 70	70' @ .112 (uncut)	oxide
		(.059 cut as in block model)	
R91-722 (TD = 70')	10 - 15	5 @ .055	oxide
	60 - 70	10' @ .040	oxide

Geologic mapping of advance and final walls continued. Assistance was provided to grade control as needed.

Rod MacLeod

Sandor Ringhoffer

rrl

cc: Victor Miller Mike Golliher DATE:

**MARCH 8 1991** 

TO:

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JIM BARRON

FROM:

VICTOR MILLER/MIKE GOLLIHER

SUBJECT:

MONTHLY REPORT - FEBRUARY 1991

### **MINING**

A total of 54,030 tons of ore and 216,528 tons of waste were mined this month. The high stripping ratio for this month (4.0:1) makes up for the last month's low stripping ratio (2.1:1). Overall, we are just 4% below budgeted year-to-date ore and waste production. Active areas in Phase I were the Sunday and Dakota Maid 5420 benches and the Sunday 5400 bench. In Phase II, we mined 75,928 tons of ore and waste from the Sunday 5500 bench.

As drilling progressed farther into the Dakota Maid, more ore was developed. However, along with the oxide ore, we are seeing significant areas of sulfide ore earlier than expected. The Phase I mine plan called for leaving that sulfide ore in place and just mining the oxide. The model shows oxide ore below these areas so plans are being made with Rod and Sandor to drill some 75 ft holes to see if the sulfide is continuous. If it is, we will make some changes to the Phase I design and adjust reserves as required.

Stockpile volumes at the end of the month are as follows:

	<b>TONS</b>	<b>GRADE</b>
Ruby Stockpile	64,218.9	0.038
Crusher Stockpile	6,210.0	0.040
ROM Stockpile	68,400.	0.052

#### **ENGINEERING**

A technical revision is being prepared by Myron to address moving the old tailings. The approach we would like to take is to remove such tailings that are within the present pit design and to reclaim in place the remainder. The technical revision should be completed within the next couple of weeks.

The design of an extension to the Ruby Waste Dump was completed and submitted to Pat for his review and approval.

Anne Baldrige from EIC was here to inspect the site. Her analysis for a new water balance is still pending. Results should be back early in March.

NJS Engineering and Twin City Testing were on site to do bearing pressure tests for the solution return line crossings. Initial results look encouraging. We may not even need a culvert type cover for the pipe lines where they come out of the leach pad.

Christensen completed this phase of topsoil recovery in the Ruby Waste Dump and moved some of his equipment out.

The NLRB hearing to resolve charges against Blattner was held and resulted in Blattner's favor.

Vic Miller attended the annual SME Convention in Denver.

Victor Miller

Mike Golliher

/rrl

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cc: Jim Barron Rod MacLeod

## GILT EDGE MINE

### BROHM MINING CORP.

### MINE STATISTICS FOR FEBRUARY 1991

DESCRIPTION	MONTH T	O DATE	YEAR TO	DATE	PROJECT T	O DATE
	B.C.Y.	TONS	B.C.Y.	TONS	B.C.Y.	TONS
SUNDAY PIT ORE	17153	34306	47150	94300	1219581	2439162
SUNDAY PIT WASTE	88540	177080	166506	333012	1962720.5	3925441
TOTAL SUNDAY PIT	105693	211386	213656	427312	3152304.5	6304609
DAKOTA PIT ORE	9862	19724	35470	70940	144812	289624
DAKOTA PIT WASTE	19724	39448	58137	116274	639262	1278524
TOTAL DAKOTA MAID	29586	59172	93607	187214	784074	1568148
TOTAL ORE MINED	27015	54030	82620	165240	1364393	2728786
TOTAL WASTE MINED	108264	216528	224643	449286	2571985.5	5143971
TOTAL MINED	135279	270558	307263	614526	3936378.5	7872757
GRADE ORE MINED		AU 		AU		AU 
SUNDAY PIT ORE		0.050		0.037		0.042
DAKOTA PIT ORE		0.043		0.065		0.054
TOTAL ORE MINED		0.048		0.050		0.043

ASSUME: 2 TONS/BCY

ASSUME: 26.0 BCY/TRUCK

# GILT EDGE MINE MONTHLY STATISTICS COMPARED TO BUDGET FEBRUARY, 1991

	<u>MONTH</u>			<u>YEAR TO DATE</u>		
	Budget	<u>Actual</u>	<u>Variance</u>	Budget	<u>Actual</u>	Variance
ORE MINED (TONS)	90,000	54,030	<35,970>	180,000	165,240	<14,760>
WASTE MINED (TONS)	230,000	216,528	<13,472>	460,000	449,286	<10,714>
TOTAL MINED (TONS)	320,000	270,558	<49,442>	640,000	614,526	<25,474>
GRADE ORE MINED (OZ/TON AU)	0.038	0.048	0.010	0.042	0.050	0.008
ORE CRUSHED (TONS)	90,000	44,779.5	<45,220.5>	180,000	163,343.7	<16,656.3>
GRADE ORE CRUSHED (OZ/TON AU)	0.035	0.034	<0.001>	0.038	0.034	0.004
ORE TO PADS (TONS)	120,000	90,938.3	<29,061.7>	200,000	175,658.9	<24,341.1>
SPENT ORE FROM PADS (TONS)	120,000	127,994.9	7,994.9	200,000	127,994.9	<72,005.1>
METAL PRODUCED (OZ) AU AG	2,550 1,944	1,961.46 4,401.16		5,362.0 3,888.0	5,011.92 8,311.30	

### AVERAGE DAILY CRUSHER HEAD NaCN SHAKE VS FIRE

i	TONS	A.A.	A . A .	Fire	Fire		
Date	!	Au opt	ounces	Au opt	ounces		
02/04/91	7822.4	0.036	281.606	0.032	250.317	Heap	39
02/05/91	6239.4	0.038	237.097	0.040	249.576		
02/06/91	2591.5	0.040	103.660	0.042	108.843		
02/19/91	4474.6	0.024	107.390	0.022	98.441		
02/20/91	4146.2	0.032	132.678	0.031	128.532	HEAP	40
02/21/91	3075.0	0.040	123.000	0.035	107.625		
02/22/91	4101.4	0.036	147.650	0.036	147.650	•	
02/26/91	3910.0	0.018	70.380	0.022			
02/27/91	4418.0	0.032	141.376	0.032	141.376	-Fire	0.036
02/28/91	4001.0	0.042	168.042	0.045	180.045		
TOTAL	44779.5	0.034	1512.881	0.033	1498.426		

	MONTHLY REPORT
DATE:	APRIL 5, 1991
TO:	JIM BARRON
FROM:	ROD MACLEOD
SUBJECT:	MONTHLY REPORT -MARCH 1991

### SUMMARY

During the month of March, the geology department:

- .. Continued underground mapping and sampling in the Hoodoo Extension area;
- .. Continued to work on a summary of 1991 exploration target areas;
- .. Began a review of Oakmont Resources data package;
- .. Collected metallurgical samples for sulphide leach testwork;
- Completed a cost, footage and time comparison on different core sizes to be drilled for metallurgical testwork;
- .. Prepared for and began an in pit development drilling program;
- .. Compiled a summary of rock and ore type data for each cell or heap in which data was available; and,
- .. Continued in pit advance and final wall mapping and assisted with grade control.

### **EXPLORATION**

Underground mapping and sampling of Hoodoo's Adit #3 was completed. Assay results are summarized as follows:

Hoodoo Adit #3	No.	% of Total
Samples < 0.020 opt Au	11	79%
Samples ≥ 0.020 opt Au	3	21%

The results are not as encouraging as from Hoodoo Adit #1, but we still feel there is good exploration potential for oxide ore in the area.

A summary of all exploration targets on BMC controlled lands should be complete by the second week of April, 1991.

A review of Oakmont Resources data package was begun. Due to other activities, it has temporarily been put on the "back burner".

### **METALLURGY**

Twenty barrels of samples were collected and sent to N.A. Degerstrom in Spokane for sulphide leach testwork. A total of 6.1 tons of sulphide ore was shipped.

A cost, footage and time estimate was completed for a metallurgical core program. It was recommended in a memo data March 21 that PQ core be drilled because of cost and sample distribution benefits. Since this analysis did not consider four-inch core, further analysis has been requested. The cost of the PQ program was estimated to be \$202,000 for 4,150 feet of PQ core (3,110 feet would be used for metallurgical test work).

### PIT GEOLOGY

An in pit development drilling program began in March. A total of 15 holes have been drilled to date (2,023 feet). The total cost for drilling is estimated to be \$19,256.60 or \$9.52/ft. A summary of all drill data is attached.

Rock and ore type information which was documented, was summarized for each cell. The information was requested by Laura and the Engineering Department,.

In pit mapping and assistance to grade control continued in March.

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cc: Victor Miller Mike Golliher

	MONTHLY	REFORE	
DATE:	APRIL 5 1991		
TO:	JIM BARRON		24
FROM:	VICTOR MILLER/MIKE GOLLIHER	7/111	WGell_

### **MINING**

A total of 78,182 tons of ore and 165,420 tons of waste were mined this month. The 1991 production schedule budgeted 90,000 tons of ore and 235,000 tons of waste along with 120,000 tons to the leach pad and 120,000 tons from the leach pad for a total of 565,000 tons of material moved. Actual tons loaded and unloaded from the leach pad were 18,193.5 tons and 38,085.8 tons high, respectively. Actual total tons moved was 539,881.3 versus a budget of 565,000 tons (a 4.4% difference). Thus, the below budget ore and waste production was offset by the extra pad on/off tonnage. In april, it appears that the pad on/off will be under budget, which will allow the mine to catch up on its budgeted ore and waste mining. Active areas in Phase I were the Sunday and Dakota Maid 5420 benches, and the Sunday 5400 bench. The Sunday and Dakota Maid 5500 benches were active in Phase II.

The very north end of the Dakota Maid pit was to be mined to the 5440 elevation, leaving the 5420 bench. Because the 5440 bench in this area had sufficient oxide ore to justify mining, the mine decided to schedule the 5420 bench to be mined. Unfortunately, after drilling and blasting, this lower bench proved to be mostly sulfide. Rather than mine the material and place it in the already overcrowded sulphide stockpile at a cost per ton of \$1.07. The blasted material on the 5420 bench was left at a cost of \$.45 per ton. This cost appeared as a force account charge for the month of \$14,632.20.

Stockpile volumes at the end of the month are as follows:

	TONS	GRADE
Ruby Stockpile	21,383.9	0.038
Crusher Stockpile	17,901.0	0.057
ROM Stockpile	48,460.	0.041

# **ENGINEERING**

The technical revision to move the old tailings to the Ruby waste dump was completed and submitted to the State. The initial response from them was negative, tailings must be reclaimed in place. However, there appears to be a way to design the mine around the tailings in such a way as to minimize rehandling of those tailings, if this is correct, the tailings can be reclaimed in place.

NJS completed the design of the portable crossing for the solution return lines. Design for the permanent crossing where the lines emerge from the dike was halted based on the results of the new water balance and the fact that we may need to raise the dike only 2-3 feet. Raising the dike that amount will not effect the return lines.

Variable cutoff reserves for the sulphide pit were completed as well as one possible Anchor Hill oxide pit.

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cc: Jim Barron

Rod MacLeod

# GILT EDGE MINE

# BROHM MINING CORP.

MINE STATISTICS FOR MARCH 1991

DESCRIPTION	монтн т	O DATE	YEAR TO	DATE	PROJECT T	O DATE
	B.C.Y.	TONS	B.C.Y.	TONS	B.C.Y.	TONS
SUNDAY PIT ORE	13890	27780	61040	122080	1233471	2466942
SUNDAY PIT WASTE	34377	68974	200993	401986	1967210.5	3934421
TOTAL SUNDAY PIT	48377	96754	262033	524066	3200681.5	6401363
DAKOTA PIT ORE	25201	50402	60671	121342	170013	340026
DAKOTA PIT WASTE	48223	96446	106360	212720	687485	1374970
TOTAL DAKOTA MAID	73424	146848	167031	334062	857498	1714996
TOTAL ORE MINED	39091	78182	121711	243422	1403484	2806968
TOTAL WASTE MINED	82710	165420	307353	614706	2654695.5	5309391
TOTAL MINED	121801	243602	429064	858128	4058179.5	8116359
GRADE ORE MINED		AU		AU		AU
SUNDAY PIT ORE		0.052		0.041		0.042
DAKOTA PIT ORE		0.039		0.055		0.052
TOTAL ORE MINED		0.044		0.048		0.043

ASSUME: 2 TONS/BCY

ASSUME: 26.0 BCY/TRUCK

# GILT EDGE MINE MONTHLY STATISTICS COMPARED TO BUDGET MARCH 1991

		-MONTH		Y	EAR TO DATE	-
DESCRIPTION	1991 Budget	Actual	Variance	1991 Budget	Actual	Variance
Ore Mined (tons)	90,000	78,182	<11,818>	270,000	243,422	<26,578>
Waste Mined (tons)	235,000	165,420	<69,580>	695,000	614,706	< 80,294 >
Total Mined (tons)	325,000	243,602	<81,398>	965,000	858,128	<106,872>
Grade Ore Mined (oz/ton Au)	0.040	0.044	0.004	0.041	0.048	0.007
Ore Crushed (tons)	90,000	107,049.5	17,049.5	270,000	270,393.2	393.2
Grade Ore Crushed (oz/ton Au)	0.037	0.045	0.008	0.038	0.039	0.001
Ore to Pads (tons)	120,000	138,193.5	18,193.5	320,000	313,852.4	<6,147.6>
Spent Ore From Pads (tons)	120,000	158,085.8	38,085.8	320,000	286,080.7	<33,919.3>
Metal Produced (oz):			1			
Au	3,044	2,943.29	<100.71>	8,406.0	7,955.21	<450.79>
Ag	1,944	5,384.74	3,440.74	5,832.0	11,216.74	5,384.74

# AVERAGE DAILY CRUSHER HEAD NaCN SHAKE VS FIRE

Date	TONS	A.A.   Au opt	A.A. ounces	Fire   Au opt	Fire ounces	
03/01/91 03/04/91 03/05/91 03/06/91 03/07/91 03/11/91 03/12/91 03/13/91 03/14/91 03/15/91 03/15/91 03/18/91 03/19/91 03/20/91 03/22/91	4487.6 6402.2 5495.4 6331.0 6734.0 5802.0 6697.0 6372.0 4478.1 7345.3 7108.3 6831.0 7445.8 5576.1 6359.6	0.031 0.040 0.039 0.031 0.030 0.034 0.035 0.040 0.040 0.040 0.040 0.057 0.057 0.064 0.070	139.116 256.088 214.321 196.261 202.020 197.268 234.395 216.648 179.124 293.812 270.115 389.367 424.411 356.870 445.172	0.035   0.044   0.039   0.036   0.032   0.034   0.035   0.035   0.037   0.037   0.039   0.050   0.058	281.697 214.321 227.916 215.488 197.268 241.092 223.020 174.646 271.776 277.224 341.550 431.856 446.088 527.847	
03/25/91 03/26/91	6567.1   7017.0	0.053 0.028	348.056 196.476	0.061	400.593	
TOTAL	107049.5	0.043	4559.520	0.045	4868.025	

# MONTHLY REPORT DATE: MAY 3, 1991 TO: JIM BARRON FROM: ROD MACLEOD Z ... SUBJECT: MONTHLY REPORT - APRIL 1991

# SUMMARY

During the month of April, the geology department:

- Cleared drill trails and sites of timber in the Hoodoo Extension area and two holes were drilled;
- Completed in pit development drilling;
- Completed a review of the 1991 exploration program and a revised AFE was prepared;
- .. Revised the interpretation of ore type and lithologic contacts in the Dakota Maid Pit area;
- .. Continued field work in 1991 exploration/condemnation areas, and;
- .. Contineud pit advance and final wall mapping.

# **EXPLORATION**

Drill trails and sites were cleared of timber in the Hoodoo Extension area. Two holes were then drilled before bad weather prevented drilling the total of four planned. The Douglas drill rig worked well in this area as long as the trails and sites were perpendicular to slopes and not too sidling. Because of this constraint, two of the access trails and sites need to be modified before drilling. Both holes have been plugged and collars surveyed.

Additional detailed field mapping, a review of potential drill sites, and permitted roads was begun in the Ruby Ridge area.

A review of the 1991 oxide exploration program was completed with Jim Anderson on April 25. Subsequent to that review, the AFE was revised and submitted for approval.

# MINE GEOLOGY

In pit development drilling was completed in April. The following is a summary of drilling statistics.

Area	No. Holes	Footage Drilling
Dakota Maid Pit	14	2338'
Bone Yard (Bunny Ear)	4	565'
Marginal Dump	5	443.'
Hoodoo Extension Area	2	390'
TOTAL	25	3736'

The total cost of the program to date is \$39,669.31. The overall cost per foot is \$10.62/foot. The most costly drilling was on the marginal dump due to slow drilling conditions and charges on the hourly rate.

The ore type and lithologic contracts have been revised for the Dakota Maid pit and entered into the VBM computer database.

A reinterpolation of the model blocks will be done as soon as all fire assays are complete and entered into the database. At this time, the fire assays are 40% complete.

rrl

cc: Victor Miller Mike Golliher

		ILY REPORT		
DATE: TO:	MAY 8, 1991 JIM BARRON			
FROM:	VICTOR MILLER/MIKE GOLLIHER		ucell_	12 Mil

# **MINING**

A total of 121,656 tons of ore and 247,956 tons of waste were mined this month. Projected production tonnages for the month varied weekly because of the uncertainty of when Cell #5 could be off loaded. The final production figures are higher than the final forecast for a number of reasons: 1) through creative scheduling, we were able to keep all of Blattner's operators busy thus allowing us to mine more ore and more waste; 2) the way the monthly survey is done, when a bench is completed, such as the 5500, Blattner gets credited for any small volumes that might have been missed and any underestimation of the interpolated contours is resolved. In the end, we finished the month 1.3% above budget for the mine.

Active benches during the month were the Phase II 5500, which was completed, and the Sunday and Dakota Maid 5400 bench.

Force account charges for the month totaled \$60,771. Most notable of those charges are \$26,215 for stockpiling ore on the Ruby Dump and \$22,556 for wet holes. Generally we see more wet holes in the spring because of all the moisture but we are also finding a far greater percentage of blastholes in the Dakota Maid Pit with water in them. Neither Rod nor I can explain all the extra water in those holes.

Stockpile volumes at the end of the month are as follows:

	TONS	GRADE
Ruby Stockpile	62,039.9	0.042 opt
Crusher Stockpile	32,423.9	0.045 opt
ROM Stockpile	59,560.	0.042 opt

# **ENGINEERING**

The technical revision to move the relic tailings to the Ruby waste dump has been withdrawn. Consequently, we will mine around the tailings, hopefully rehandling them as little as possible.

Surveying additional aerial targets was completed. Now we wait for a break in the cloud cover to do the actual photography. Maps and AUTOCAD drawings will be completed approximately 30 days after the photography is done.

Revised waste dump plans for Hoodoo and Ruby Gulches were submitted to Pat and Myron. Their initial conversations with the DENR indicate that the technical revision will be quickly approved. If we were to dump an additional 160,000 tons of waste into Hoodoo Gulch, that area could be reclaimed. A cost estimate for reclaiming that area should be completed shortly.

Design, scheduling and economics were done on a sulfide heap leach pit.

Cell 5 spent ore was placed on top of the Ruby waste dump. Tail fire assays showed a grade of 0.017 opt and tail AA assays were 0.011.

The blast pattern used for Phase II was tightened up to a 12' X 12' pattern. Breakage should improve and we'll work to maintain acceptable movement to minimize dilution.

Started reclaiming the north end of the Dakota Maid pit. Sulfide material is becoming more prominent so those areas are being abandoned.

rrl

c: Jim Barron Rod MacLeod

# GILT EDGE MINE

# BROHM MINING CORP.

MINE STATISTICS FOR APRIL 1991

DESCRIPTION	MONTH T	O DATE	YEAR TO	DATE	PROJECT T	O DATE
	В.С.Ү.	TONS	В.С.Ү.	TONS	B.C.Y.	TONS
SUNDAY PIT ORE	49552	99104	110592	221184	1283023	2566046
SUNDAY PIT WASTE	57093	114186	258086	516172	2024303.5	4048607
TOTAL SUNDAY PIT	106645	213290	368678	737356	3307326.5	6614653
DAKOTA PIT ORE	11276	22552	71947	143894	181289	362578
DAKOTA PIT WASTE	66885	133770	173245	346490	754370	1508740
TOTAL DAKOTA MAID	78161	156322	245192	490384	935659	1871318
TOTAL ORE MINED	60828	121656	182539	365078	1464312	2928624
TOTAL WASTE MINED	123978	247956	431331	862662	2778673.5	5557347
TOTAL MINED	184806	369612	613870	1227740	4242985.5	8485971
GRADE ORE MINED		AU		AU		AU
SUNDAY PIT ORE		0.051		0.046		0.042
DAKOTA PIT ORE		0.037		0.052		0.051
TOTAL ORE MINED		0.048		0.048		0.043

ASSUME: 2 TONS/BCY

ASSUME: 26.0 BCY/TRUCK

# GILT EDGE MINE MONTHLY STATISTICS COMPARED TO BUDGET APRIL 1991

		MONTH		YEAR TO DAT	E	
DESCRIPTION	1991 Budget	Actual	Variance	1991 Budget	Actual	Variance
Ore Mined (tons)	120,000	121,656	1,656	390,000	365,078	<24,922>
Waste Mined (tons)	245,000	247,956	2,956	940,000	862,662	<77,338>
Total Mined (tons)	365,000	369,612	4,612	1,330,000	1,227,740	<102,260>
Grade Ore Mined (oz/ton Au)	0.042	0.048	0.006	0.041	0.048	0.007
Ore Crushed (tons)	120,000	110,954.9	<9,045.1>	390,000	381,348.1	8,651.9
Grade Ore Crushed (oz/ton Au)	0.039	0.043	0.004	0.038	0.040	0.002
Ore to Pads (tons)	120,000	55,776	<64,224>	440,000	369,628.4	<70,371.6>
Spent Ore From Pads (tons)	120,000	0	120,000	440,000	286,080.7	<153,919.3>
Metal Produced (oz):						
Au	3,232	2,034.75	<1,197.25>	11,638.0	9,989.96	<1,648.04>
Ag	2,592	4,647.62	2,055.62	8,424.0	15,864.36	7,440.36

May 343471 3389.75

Voar 2516.74 2783.56

# AVERAGE DAILY CRUSHER HEAD NaCN SHAKE VS FIRE

	TONS	] A.A.	A.A.	Fire	Fire	
Date	1	Au opt	ounces	Au opt	ounces	
					<b></b>	
04/01/91	5754.2	0.022	126.592	0.027	155.363	
04/02/91	6791.0	0.031	210.521	0.036	244.476	
04/03/91	6292.0	0.028	176.176	0.032	201.344	
04/04/91	7509.1	0.044	330.400	0.049	367.946	
04/08/91	6247.3	0.031	193.666	0.037	231.150	
04/09/91	4133.0	0.050	206.650	0.064	264.512	
04/10/91	3982.4	0.084	334.522	0.114	453.994	
04/11/91	4896.0	0.034	166.464	0.040	195.840	
04/15/91	2169.0	0.024	52.056	0.026	56.394	
04/16/91	5118.0	0.049	250.782	0.058	296.844	
04/17/91	4882.4	0.034	166.002	0.037	180.649	
04/18/91	5439.3	0.036	195.815	0.037	201.254	
04/19/91	6321.0	0.039	246.519	0.042	265.482	
04/20/91	4169.4	0.031	129.251	0.040	166.776	
04/23/91	1 4225.3	0.025	105.633	0.035	147.886	
04/24/91	9118.3	0.031			300.904	
04/25/91		•		1		
	6001.3			•		
04/29/91	7758.0	0.035	271.530	0.049	380.142	
04/30/91	3349.0	0.036	120.564	0.038	127.262	
TOTAL	110954.9	0.036	4031.821	0.043	4732.640	

# MONTHLY REPORT

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DATE:

JUNE 4, 1991

TO:

JIM BARRON

FROM:

ROD MACLEOD

SUBJECT:

MONTHLY REPORT - MAY 1991

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# SUMMARY

During the month of May, the geology department:

- .. Began field mapping and sampling in the Ruby Ridge and Southeast Langley areas;
- Continued summarization of data and interpretation of geologic data from the development drilling program;
- .. Continued advance and final wall mapping in the oxide pits;
- .. Reviewed geologic and model data with WGM personnel as part of their due diligence review of Gilt Edge; and,
- .. Made a presentation to approximately 125 8th graders followed by a tour of the mine for 53 8th graders from South Jr. High School, Rapid City.

# **EXPLORATION**

Detailed road cut mapping and sampling was begun in the Ruby Ridge and Southeast Langley areas. This mapping is providing us better information on drilling targets such as alteration and structural zones in the Ruby Ridge area and definition on the limits of brecciation in the Southeast Langley area. In addition, the "Crown Point adit" was mapped and sampled in the Southeast Langley area.



# **EXPANSION PROJECT**

A compilation of sample rock types and locations used for metallurgical testwork at N.A. Degerstrom was completed. As part of this compilation, the percentages of each rock type which comprise ore in the sulphide leach pit was determined and the six inch core inventory was reviewed as a limited potential source of material for additional metallurgical testwork.

In addition, a cost estimate and drill site locations were completed for additional metallurgical core drilling within the sulphide leach pit.

Work was also begun on a cost estimate for condemnation drilling in facility areas for the expansion project.

Finally, geologic and model data was reviewed with WGM personnel as part of their due diligence review of Gilt Edge. Maps and memos pertinent to their review were also prepared for them.

# MINE GEOLOGY

Final wall and advance mapping continue during the month. Some additional time and care has been required in the Dakota Maid Pit due to the complex geology.

All fire assays have now been received and summarized for the development drilling program. The data will be entered and reinterpolated when Dwain is free to do so.

rrl

c: Victor Miller Mike Golliher

# MONTHLY REPORT



### 00000000000000000000

DATE:

JUNE 10, 1991

TO:

JIM BARRON

FROM:

VICTOR MILLER/MIKE GOLLIHER

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SUBJECT:

MONTHLY REPORT - MAY, 1991

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## MINING

For May, nearly twice the tonnage was moved on and off the pad (438,674 tons) than was budgeted (240,000 tons). Thus mine tonnage moving capacity was shifted from the lower priority pit to the higher priority pad. Mined ore tons from the pit were 98,658 (budget was 120,000 tons) and waste tons were 186,910 tons (budget was 245,000 tons).

During the month, the lack of capacity to mine waste and ore to waste reversals in the Dakota Maid pit taxed the mines ability to supply ore to the crusher. During June, the planned low ore requirement should allow the mine to catch up on the waste removal.

Active benches were the 5480 Sunday Phase II, 5400 Dakota Maid Phase I, and 5380 Sunday Phase I.

Force account charges for the month totalled \$26,722. Of this, \$18,876 were for wet holes which is over the \$6,000 budgeted and due to the wet weather.

Stockpile volumes at the end of the month are as follows:

	TONS	GRADE
Ruby Stockpile	1,998.9	0.040 opt
Crusher Stockpile	13,703.4	0.046 opt
ROM Stockpile	39,060.	0.042 opt

# **ENGINEERING**

A small 16 MT sulfide pit was designed and scheduled to further optimize the project's ROR. Waste dumps for the pit will only involve the Butcher Gulch to the 5400 elevation. A meeting was attended with Roberts and Schaffer and Frank Monninger to discuss the concept.

With the completion of the Phase I 5400 bench, a reconciliation was made between the model and the blast hole indicated tons. Following is a summary of this comparison:

S	SUNDAY		
	TONS	GRADE	
Blasthole	150,750.	.051	
Model (.022 cu)	110,350.	.047	
Difference	40,400.	.004	

DAKOTA MAID					
	TONS	GRADE			
Blasthole	89,810.	.039			
Model (.022 cu)	150,850.	.041			
Difference	(61,040.)	(.002)			

Aerial photography was completed the second week of May. Complete topo maps and AUTOCAD drawings should be received within the next couple of weeks.

rrl

c: Rod MacLeod

# GILT EDGE MINE MONTHLY STATISTICS COMPARED TO BUDGET MAY 1991

MONTH				YEARTO DATE			
DESCRIPTION	1991 Budget	Actual	Variance	1991 Budget	Actual	Variance	
Ore Mined (tons)	120,000	98,658	<21,342>	510,000	463,736	<46,264>	
Waste Mined (tons)	245,000	186,910	<58,090>	1,185,000	1,049,572	<135,428>	
Total Mined (tons)	365,000	285,568	<79,432>	1,695,000	1,513,308	<181,692>	
Grade Ore Mined (oz/ton Au)	0.046	0.039	< 0.007 >	0.042	0.046	0.004	
Ore Crushed (tons)	120,000	119,157	< 843 >	510,000	500,505.5	9,494.5	
Grade Ore Crushed (oz/ton Au)	0.042	0.040	< 0.002 >	0.039	0.040	0.001	
Ore to Pads (tons)	120,000	197,919	77,919	560,000	567,547	<754>	
Spent Ore From Pads (tons)	120,000	234,707	114,707	560,000	520,788	<39,212>	
Metal Produced (oz):							
Au	3,427	4,065.22	838.22	15,065.0	13,886.27	<1,178.73>	
Ag	2,592	3,682.91	1,090.91	11,016	20,740.42	9,724.42	

# GILT EDGE MINE

# BROHM MINING CORP.

# MINE STATISTICS FOR MAY 1991

DESCRIPTION	HONTH TO DATE		YEAR TO	DATE	PROJECT TO DATE	
	В.С.У.	TONS	В.С.Ү.	TONS	В.С.У.	TONS
SUNDAY PIT ORE	23282	46564	133874	267748	1306305	261241
SUNDAY PIT WASTE	35371	70742	293457	586914	2059674.5	4119348
TOTAL SUNDAY PIT	58653	117306	427331	854662	3361979.5	573135 ·
DAKOTA PIT ORE	26047	52094	97994	195988	207326	414671
DAKOTA PIT WASTE	58084	116168	231329	462658	212454	1624901
TOTAL DAKOTA MAID	84131	168262	329323	658646	1019790	2039531
TOTAL ORE MINED	49329	98658	231868	463736	1513641	3027282
TOTAL WASTE MINED	93455	186910	524786	1049573	2872128.5	574425"
TOTAL MINED	142784	285568	756654	1513308	4385769.5	8771533
GRADE ORE MINED		AU		AU		AU
SUNDAY PIT ORE		0.039		9.044		0.042
SAKOTA PIT ORE		0.939		9.948		0.049
TOTAL ORE MINED		0.039		0.045		0.043

ASSUME: 2 TONS/BCY

ASSUME: 26.0 BCY/TRUCK

# AVERAGE DAILY CRUSHER HEAD NaCN SHAKE VS FIRE

	TONS	A.A.	A.A.	Fire	Fire	
Date		Au opt	ounces	Au opt	ounces	
05/01/91	6302.8	0.040	252.112	0.044	277.323	
05/02/91	4630.3	0.024	111.127	0.026	120.388	
05/06/91	4725.1	0.040	189.004	0.064	302.406	
05/07/91	5755.0	0.027	155.3 <b>85</b>	0.025	143.875	
05/08/91	6415.1	0.035	224.529	0.041	263.019	
05/09/91	1 7018.0	0.050	350.9 <b>00</b>	0.058	407.044	
05/10/91	5990.2	0.044	263.569	0.046	275.549	
05/11/91	. 3962.1	0.039	154.522	9.045	178.295	
05/13/91	6177.0	0.034	210.013	0.038	234.726	
05/14/91	1 5762.2	0.040	230.488	0.038	218.964	
05/15/91	7451.5	0.035	260.803	0.038	283.157	
05/16/91	3714.4	0.028	104.003	0.034	126.290	
05/17/91	5403.5	0.035	189.123	0.037	199.930	
05/20/91	1 6265.0	0.028	175.420	0.031	194.215	
05/21/91	5685.1	0.031	176.2 <b>38</b>	0.036	204.664	•
05/22/91	5992.6	0.023	137.330	0.033	197.756	
05/23/91	4448.0	0.024	106.752	0.032	142.336	
05/28/91	1 5227.5	0.026	161.915	0.329	130.598	
	6968.2		243.887	0.056	390.219	
05/30/91	4774.6	0.038	181.435	0.040	190.984	
	5489.2		219.568	0.044	241.525	
	:					
TOTAL	1119157.4	0.034	4098.6	0.040	4773.3	

# MONTHLY REPORT



# 

DATE:

JULY 2, 1991

TO:

JIM BARRON

FROM:

ROD MACLEOD

SUBJECT:

**MONTHLY REPORT - JUNE 1991** 

## 

### SUMMARY

During the month of June, the geology department:

- .. Assisted the environmental and process departments wherever we were needed;
- .. Prepared to begin exploration drilling for additional oxide reserves;
- .. Started work on a reconciliation of modeled versus actual ore types mined; and,
- .. Continued mining advance mapping.

Due to a leak of process solution from the pad, the geology department made themselves available to the environmental and process departments for whatever assistance they could provide.

### OXIDE EXPLORATION

The 1991 oxide exploration plans and AFE (\$200,000 total) was reviewed with Allen Bell on Wednesday, June 26. The AFE was approved with the understanding that the program would be reviewed after each \$50,000 expenditure. Four thousand four hundred feet of drilling has been laid out on cress-sections with most drilling planned (2,400 feet) for the southeast Langley breccia zone. A set of exploration target maps and a brief geologic summary of the target areas to be drilled is being prepared for Mr. Bell.

# MINE GEOLOGY

Mining advance mapping continued during the month.

In addition, a bench by bench (5480 through 5380) reconciliation of modeled ore types versus actual ore types mined was begun.

## **MISCELLANEOUS**

A response was finally received from Lakefield Labs regarding the nature and weight of the metallurgical test materials they are storing. Due to: 1) the expense of shipping the material back to us; 2) the toxicity of some of the material; and, 3) mixing of the sample material, it was decided that Lakefield would dispose of the material for us, at a cost of \$5,000. Storage of the material would have cost us \$15,200+ or shipping non-toxic material and disposal of toxic material was estimated to cost approximately \$8,000.

An offer was made to Walter Greene for his half interest in the Ample lode. He said he wanted \$3,000 plus all legal fees. No counter offer is planned at this time. Instead, we will reassess the need for purchasing that property.

гl

c: Victor Miller Mike Golliher

# MONTHLY REPORT



### 

DATE:

JULY 11, 1991

TO:

JIM BARRON

FROM:

VICTOR MILLER/MIKE GOLLIHER

I/M

SUBJECT:

**MONTHLY REPORT - JUNE, 1991** 

### 

# <u>MINING</u>

In June, the mine had difficulty producing the ore required by the crusher. The 18,307 tons additional crushed over mine came from the ROM stockpile which was at 39,080 tons at the beginning of the month, and 20,500 tons by the end of the month. At one point during the month, the ROM stockpile was down to under 5,000 tons. The total mined for the month was 78,922 versus 120,000 budgeted.

Waste mined was 12,262 under budget. This was needed to compensate for May when the waste stripping fell below the budgeted stripping ratio.

For June, pad tonnage on and off was 49,350 tons over the 120,000 tons budgeted. Thus the total tons moved by Blattner (pad and mine) was only 3,984 or 0.8% off budgeted (actual = 481,016, budgeted = \$485,000).

Force account changes for the month totaled \$42,635.60. The wet hole charges were \$29,370 while only \$6,000 was budgeted. Other unbudgeted charges were:

1.	Scale highwall experiment	346.00
2.	Crush waste for dike raising	1,000.00
3.	Blade process area	292.50
4.	Rebuild Hoodoo sediment ponds	1,158.00
5.	Leak related work	1,654.50
6.	Access road grade work	865.50
7.	Dozer work on tailings	1,273.00
	Total	6,589.50

The remainder of the force account charges of \$6,676.10 were for other departments.

Stockpile volumes at the end of the month were as follows:

	TONS	GRADE
Ruby Stockpile	18,497.5	0.043 opt
Crusher Stockpile	939.9	0.046 opt
ROM Stockpile	20,500.	0.042 opt

Just prior to the storm on the afternoon of June 5, all the mine's sedimentation ponds were cleaned out. This probably contributed to the fact that sedimentation-wise, the mine came through very well. However, due to the large amount of sediment from the storm, all this work had to be redone after the storm.

A new road and sedimentation structure was constructed below the existing sedimentation pond in Ruby Gulch which is about to be overrun by the waste dump.

Timber clearing was completed in the Ruby area and top soil removal begun.

### **PERSONNEL**

Vic Miller and Mike Golliher attended a one minute manager course on June 5, 1991.

# **ENGINEERING**

Work was begun to determine the yearly haul cycle time for the 16 MT sulfide project. This will be essential for estimating the project's mining costs and bidding for possible contract mining.

New storage estimates were determined for the leach pad with Cell 7 only half loaded.

The new aerial survey was received.

### MISCELLANEOUS

Personnel were used to assist the solution haulage project.

Had the timber contractor perform some community service in the Galena Gulch area for Marvin Beach.

Excavation was done on the east side of the leach pad in anticipation of the dike raising project.

rl

c: Rod MacLeod

# GILT EDGE MINE MONTHLY STATISTICS COMPARED TO BUDGET JUNE 1991

	MONTH			YEARTO DATE		
DESCRIPTION	<u> 1991 Budget</u>	<u>Actual</u>	<u>Variance</u>	1991 Budget	<u>Actual</u>	<u>Variance</u>
Ore Mined (tons):	120,000 1	78,922	<41,078>	630,000	542,658	<87,342>
Waste Mined (tons)	245,000 /	232,738	< 12,262 >	1,430,000	1,282,310	< 147,690 >
Total Mined (tons)	365,000 -	311,660	<53,340>	2,060,000	1,824,968	<235,032>
Grade Ore Mined (oz/ton Au)	0.044 -	0.054	<b>&lt;</b> 0.010 <b>&gt;</b>	0.043	0.047	0.004
Ore Crushed (tons)	120,000	97,229	<22,771>	630,000	597,734	<32,266>
Grade Ore Crushed (oz/ton Au)	0.040 -	0.041	0.001	0.039	0.040	0.001
Ore to Pads (tons)	60,000 -	93,494	33,494	620,000	661,041	40,041
Spent Ore From Pads (tons)	60,000 -	75,862	15,862	620,000	596,650	<23,350>
Metal Produced (oz):						
Au	3,108	3,434.71	591.26	18,173.0	15,941.41	<2,231.59>
Ag	2,592	3,389.75	191.56	13,608	22,037.67	8,429.67

# GILT EDGE MINE

# BROHM MINING CORP.

# MINE STATISTICS FOR JUNE 1991

DESCRIPTION	T HTROM	O DATE	YEAR TO	DATE	PROJECT T	O DATE
	B.C.Y.	TONS	В.С.Ү.	TONS	В.С.Ү.	TONS
SUNDAY PIT ORE	39461	78922	173335	346670	1345766	2691532
SUNDAY PIT WASTE	116369	232738	409826	819652	2176043.5	4352057
TOTAL SUNDAY PIT	155830	311660	583161	1166322	3521809.5	7043615
DAKOTA PIT ORE	Ø	Ø	97994	195988	207336	414672
DAKOTA PIT WASTE	Ø	0	231329	462658	812454	1624905
TOTAL DAKOTA MAID	0	Ø	329323	658646	1019790	2039580
TOTAL ORE MINED	39461	78922	271329	542658	1553102	3106204
TOTAL WASTE MINED	116369	232738	641155	1282310	2988497.5	5976995
TOTAL MINED	155830	311660	912484	1824968	4541599.5	9083199
GRADE ORE MINED		AU		AU		AU
SUNDAY PIT ORE		0.054		0.046		0.043
DAKOTA PIT ORE		0.000		0.048		0.049
TOTAL ORE MINED		0.054		0.047		0.043

ASSUME: 2 TONS/BCY

ASSUME: 26.0 BCY/TRUCK

# AVERAGE DAILY CRUSHER HEAD NaCN SHAKE VS FIRE

Date	TONS	A.A. Au opt	A.A. ounces	Fire   Au opt	Fire ounces	
06/03/91 06/04/91 06/05/91 06/06/91 06/10/91 06/11/91 06/12/91 06/13/91 06/13/91 06/13/91 06/18/91 06/19/91 06/20/91 06/21/91 06/25/91 06/27/91	6180.1   7387.0   5981.0   4663.5   8168.1   8533.1	0.034 0.033 0.029 0.020 0.026 0.027 0.039 0.034 0.037	214.172 258.220 308.313 154.748 265.004 210.123 243.771 173.449 93.270 212.371 230.394 247.654 216.492 215.455 332.415 133.458 34.776	0.041   0.035   0.034   0.027   0.029   0.031   0.047   0.040   0.044   0.067	258.220 295.729 154.748 304.755 253.384 258.545 203.354 125.915 236.875 264.526 298.455 254.696 256.216 428.304	HEAP 46
TOTAL	97228.6	9.037	3544.084	0.041	4031.448	